## 4.3 Leptospirosis

## Summary

Number of cases, 2009: 24 Number of cases, 2008: 30 Crude incidence rate, 2009: 0.57/100,000

Twenty-four cases of leptospirosis were notified in Ireland in 2009, a 20% reduction compared to the 30 cases notified in 2008 (Figure 1). This equates to a crude incidence rate of 0.57 per 100,000 (95% CI 0.34-0.79). The last year for which data are available across the EU is 2007. Among the 25 countries that reported on leptospirosis incidence at that time, Ireland reported the second highest incidence rate. The incidence in the EU as a whole was 0.22 per 100,000.

The leptospirosis notification dataset is typically dominated by adult males, and this year is no exception. Twenty-three cases (96%) were male and the age range was 17-81 (mean age =42 years, median age=40 years). This is consistent with the exposures most commonly associated with leptospirosis in temperate regions, e.g. occupational contact with farm animals, and watersports.

Among the 19 cases for which hospital admission status was reported, 17 (89%) required hospitalization. No deaths were reported.

Seven cases (29%) were believed to have acquired their illness occupationally –at least three of these were farmers. Seven (29%) cases reported canoeing/kayaking activity. For two of these cases, these activities occurred outside of Ireland –one in Asia and one in the United Kingdom. For three cases (13%), their infections were reported to have been possibly due to engaging in more common outdoor activities such as gardening/DIY, or holidaying in a tropical destination. One case (4%) was reported as resulting from accidental exposure to river water after falling in. No risk factor information was available for the remaining six (25%) cases.

While a number of regional hospital laboratories offer a diagnostic service for leptospirosis, annually around two thirds of cases are diagnosed by the National Virus Reference Laboratory. Positive specimens are generally referred to the UK Leptospirosis Reference Unit for confirmation and for typing where possible.Species information was available for only two cases in 2009 – one each Leptospira interrogans hardjo and Leptospira interrogans icterohaemorrhagiae. Species was not reported for the remaining 22 cases.

Activities that continue to be associated with leptospirosis risk in Ireland include farming and recreational activities such as water sports. In the last few years, travel to Asia has emerged as a risk factor for leptospirosis. In general the incidence of leptospirosis is higher in tropical climates than in temperate areas like Ireland.



Figure 1: Annual number of leptospirosis notifications, Ireland 1991-2009 (data source: CIDR)